

WORKSHOP ON SUBMANIFOLD THEORY AND GEOMETRIC ANALYSIS

UFSCAR, SÃO CARLOS, BRAZIL, AUGUST 05 – 09, 2019

FRIDAY- 16:30h - 17:10h -AUDITÓRIO DO DM

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Moves Preserving hyperbolicity of link complements

ABSTRACT. Given a link Γ in a 3-manifold P such that the complement $P \setminus \Gamma$ admits a complete hyperbolic metric of finite volume, we provide two potential alterations to the link, called the Chain Move and the Switch Move, that preserve hyperbolicity of the complement, with only a few manifold-link pair exceptions. Using such moves, we prove that any surface with admissible finite topology (i.e. negative Euler characteristic) can be realized as a properly embedded, totally geodesic surface in some complete hyperbolic 3-manifold of finite volume. Joint work with C. Adams and W. Meeks.

Support:



Organizers:

